

6B10

Twin Diode—Medium-Mu-Twin Triode

DUODECAR TYPE

With Heater Having Controlled Warm-Up Time

GENERAL DATA

Electrical:

Heater Characteristics and Ratings (*Design-Maximum Values*):

Voltage (AC or DC)	6.3 ^a	6.3 ± 0.6	volts
Current	0.600 ± 0.040	0.600 ^b	amp
Warm-up time (Average)	11	—	sec

Peak heater-cathode

voltage (Each unit):

Heater negative with

respect to cathode 200 max. volts

Heater positive with

respect to cathode 200^c max. volts

Direct Interelectrode

Capacitances (Approx.):^d

Diode Units:

Plate of unit No.1 to cathode,
internal shield, and heater .

1.9 pf

Plate of unit No.2 to cathode,
internal shield, and heater .

1.8 pf

Triode Units:

	Unit No.1	Unit No.2	
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Grid to plate

1.5	1.5	pf
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Grid to cathode,
internal shield,
and heater.

1.7	1.8	pf
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Plate to cathode,
internal shield,
and heater.

1.6	0.6	pf
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Plate of diode unit No.1
to plate of diode
unit No.2

0.7 pf

Triode grid to plate of
diode unit No.1

0.015	0.005	pf
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Triode grid to plate of
diode unit No.2

0.02	0.005	pf
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Plate of triode unit No.1
to plate of triode
unit No.2

0.9 pf

Characteristics, Class A₁ Amplifier (Each Triode Unit):

Plate Voltage 250 volts

Grid Voltage -8 volts

Amplification Factor 18

Plate Resistance (Approx.) 7200 ohms

Transconductance 2500 μ mhos

Plate Current 10 ma

Grid Voltage (Approx.) for plate μ a = 50 -20 volts



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Electron Tube Division
Harrison, N. J.

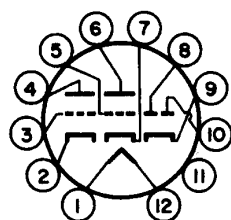
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Mechanical:

Operating Position. Any
 Types of Cathodes Coated Unipotential
 Maximum Overall Length. 1.875"
 Seated Length 1.250" to 1.500"
 Diameter. 1.062" to 1.188"
 Bulb. T9
 Base. Small-Button Duodecar 12-Pin (JEDEC No.E12-70)
 Basing Designation for BOTTOM VIEW. 12BF

Pin 1-Heater
 Pin 2-Cathode of
 Triode
 Unit No.2
 Pin 3-Grid of
 Triode
 Unit No.2
 Pin 4-Plate of
 Triode
 Unit No.2
 Pin 5-Grid of
 Triode
 Unit No.1
 Pin 6-Plate of
 Triode
 Unit No.1



Pin 7-Cathode of
 Triode
 Unit No.1
 Pin 8-Plate of
 Diode
 Unit No.2
 Pin 9-Cathode of
 Diode Units
 No.1 & No.2
 Pin 10-Plate of
 Diode
 Unit No.1
 Pin 11-Internal
 Shield
 Pin 12-Heater

TRIODE UNITS — AMPLIFIER — Class A₁

Values are for Each Unit

Maximum Ratings, Design-Maximum Values:

PLATE VOLTAGE	330 max.	volts
DC CATHODE CURRENT.	20 max.	ma
PLATE DISSIPATION	3 max.	watts

Maximum Circuit Values:

Grid-No.1-Circuit Resistance:

For fixed-bias operation.	0.25 max.	megohm
For cathode-bias operation.	1 max.	megohm

DIODE UNITS — Two

Values are for Each Unit

Maximum Ratings, Design-Maximum Values:

PLATE CURRENT	5 max.	ma
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Characteristics, Instantaneous Value:

Plate Current for plate volts = 5 . . .	20	ma
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^a At heater amperes = 0.600.

^b At heater volts = 6.3.

^c The dc component must not exceed 100 volts.

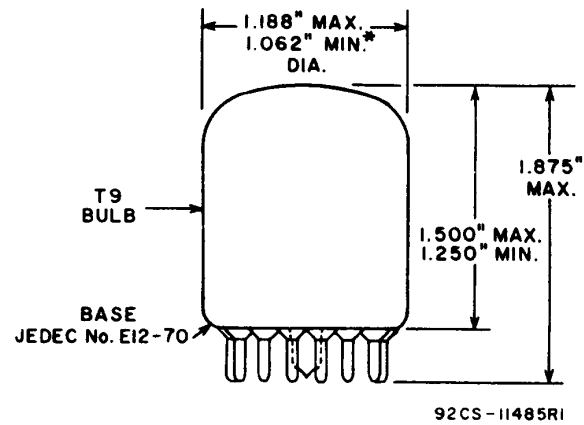
^d Without external shield.

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* APPLIES TO MINIMUM DIAMETER EXCEPT IN AREA OF SEAL.



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